Introduction to Certification Test Process and Materials

Federal agencies are governed by numerous financial management laws, regulations, etc. Those which apply to the Department of Defense (DoD) systems have been compiled into a document known as the DFAS Guide or Blue Book and are known as Federal Financial Management Requirements (FFMR). The Guide divides the requirements into chapters by topic and gives them consecutive numbers within the chapter. DFAS regularly updates the Guide as new or revised laws and regulations become applicable. DoD financial management systems must meet those requirements which are applicable to them at a specific point in time. http://www.dfas.mil/library/bluebook.pdf

There are many sources for these requirements. Some come from the Joint Financial Management Improvement Program (JFMIP).

JFMIP developed a system test for all Commercial Off The Shelf (COTS) packages. A COTS must pass this test before JFMIP will certify it for government use. The materials from the first edition of the test are located at http://www.jfmip.gov/jfmip/KBReport1.asp?rpt=1&cat=Qualification%20Testing%20Information. These materials can be tailored and incorporated into a DFAS system test to ensure the system meets those core requirements which are also DFAS FFMR.

FFMR frequently correlate closely to a business functional requirement and can be tested with the same script and transaction.

In order to know which FFMR apply to a particular system, an Independent Consulting Firm (ICF) will:

a. Assist the Automated Information Systems (AIS) functional and technical community to determine which specific FFMR apply to a particular system and are subject to verification.

b. Assist in verifying that the AIS meets those requirements which are applicable to that system. Most of this verification takes place as part of the software testing process.

c. Identify data collection points in the scripts to facilitate this review and verification. Some FFMR may be verified by other means-e.g., observation of a business practice.

Each AIS must provide documentation to the ICF supporting the validation of FFMR applicable to that system. The extent of this effort will vary from system to system. The accompanying spreadsheet has been developed to help systems with organization and creation of the necessary script and scenarios portion of the testing.

Context Terms Used

Test Scenario- A test scenario refers to a group of test scripts which test a business function. There may be varying levels and numbers of test sub-scenarios depending on level of definition of business functions. There is no specific number of scripts in a scenario but two or more is most common. This site has spreadsheets that provide a description of test scenarios which would test specific FFMR.

Test Script- A test script contains the specific items which relate to the test of a particular requirement or piece of a requirement. Scripts are composed of the following major sections: requirements description, data description, the set-up, execution and validation instructions. In order to standardize the size of scripts, to facilitate size and time estimates, a script should consist of no more than one (1) validation point. Create more scripts, if necessary.

A Twelve Step Program for Certification Testing

1. Conduct a self assessment, in conjunction with the ICF, to determine applicable FFMR.

2. Determine when, and in what context, FFMR testing will be conducted, stand alone or integrated in other system testing.

3. Develop a test plan *(this is sometimes done at other points within the process).*

4. Determine necessary referential/master data (not transaction data).

5. Develop test scripts for identified requirements. Map scripts to provided FFMR scenarios or develop other necessary scenarios. JFMIP system testing material provides cases and scenarios for core system requirements and is available at http://www.jfmip.gov/jfmip/KBReport1.asp?rpt=1&cat=Qualification%20Testing%20Information.

6. Determine data collection points in conjunction with the ICF and include in test scripts.

7. If an integrated test, determine inclusion points of FFMR/JFMIP scripts within applicable system test.

8. Build essential physical environment. See appendix for sample Application Release Checklist with list of items that might be required.

9. Build essential referential/master data (data needed to kick off the test), if not otherwise available, and also build transaction data.

10. Execute test. *Correct, restore and rerun as necessary.* Be sure to use appropriate tools to track changes and do Test Discrepancy Reporting (TDR).

11. Rerun and collect data after the test is satisfactory.

12. Prepare the necessary validation packages for certification recommendation.